We claim:

1. An optical coupling device for injecting light between end faces of two optical waveguides, said device comprising:

a holding element for holding a first optical waveguide,

a first holding block which is fitted to the second optical waveguide,

an elongate, variable-length element which is supported on the first holding block and extends in its longitudinal direction, starting from the first holding block, parallel to the end face of the second optical waveguide and on which the holding element is provided, so that the geometrical position of the end face of the first optical waveguide can be varied with respect to the end face of the second optical waveguide, such as an optical waveguide chip characterized by], wherein a second holding block which, with respect to the longitudinal direction of the variable-length element, is arranged on the side of the latter facing away from the first holding block, and

by a spring element, which is arranged between the variable-length element and the second holding block and is supported on the latter and by which the variable-length element is held and which permits movements of the variable-length element or the holding element in the longitudinal direction of the variable-length element and suppresses movement of the variable-length element perpendicular to the longitudinal direction of the variable-length element.

2. The device according to Claim 1, wherein the holding element is formed in one piece with the variable-length element, and the spring element is formed separately therefrom.

3. The device according to Claim 1, wherein the holding element, the variable-length element and the spring element are formed in one piece.

4. The device according to Claim 1, wherein the holding element and the spring element are formed in one piece and the variable-length element is formed separately therefrom.

5. The device according to Claim 2, wherein the spring element is formed by slots in the variable-length element or the holding element, the said slots lying in a plane perpendicular to the longitudinal direction of the variable-length element, the open edges running parallel to the end faces of the optical waveguides.

6. The device according to Claim 3, wherein the spring element is formed by slots in the variable-length element or the holding element, the said slots lying in a plane perpendicular to the longitudinal direction of the variable-length element, the open edges running parallel to the end faces of the optical waveguides.

7. The device according to Claim 4, wherein the spring element is formed by slots in the variable-length element or the holding element, the said slots lying in a plane perpendicular to the longitudinal direction of the variable-length element, the open edges running parallel to the end faces of the optical waveguides.

8. The device according to Claim 5, wherein an even number of slots is provided.

9. The device according to Claim 6, wherein an even number of slots is provided.

10. The device according to Claim 7, wherein an even number of slots is provided.

11. The device according to Claim 2, wherein is formed by holes in the variable-length element or the holding element, the said holes lying in a plane parallel to the end faces of the optical waveguides and lying perpendicular to the longitudinal direction of the variable-length element.

12. The device according to Claim 3, wherein the spring element is formed by holes in the variable-length element or the holding element, the said holes lying in a plane parallel to the end faces of the optical waveguides and lying perpendicular to the longitudinal direction of the variable-length element.

13. The device according to Claim 4, wherein the spring element is formed by holes in the variable-length element or the holding element, the said holes lying in a plane parallel to the end faces of the optical waveguides and lying perpendicular to the longitudinal direction of the variable-length element.

14. The device according to Claim 1, wherein the spring element consists of bent spring sheet, whose spring sections lie in planes which are perpendicular to the longitudinal direction of the variable-length element, the bent edges running parallel to the end faces of the optical waveguides.

15. The device according to Claim 6, wherein the length of the variable-length element is selected such that the spring element is under pre-stress in the initial position of the variable-length element.

16. A clip connects the device according to Claim 1, wherein the two holding blocks to each other.

17. The device according to Claim 1, wherein the two holding blocks are connected to each other by a frame, a clip being provided at the top and bottom in each case between the two holding blocks, and the clips being produced from one piece with the holding blocks.

18. The device according to Claim 1, wherein the holding element has a ferrule, in which the optical waveguide or the optical fibre is fixed.